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What Is Claimed Is:

1. A sheet handling apparatus comprising: stack means for stacking a sheet or a sheet bundle;

support means capable of moving selectively to a support position at which it supports the lower face of the sheet or the sheet bundle, or an escape position at which it escapes from the lower face of said sheet or said sheet bundle;

change-over control means for changing the support position and the escape position of said support means; and

conveyance means capable of conveying the sheet or the sheet bundle supported by said support means to said stack means.

wherein, when the rear end of the sheet or the sheet bundle is brought to reach the upper portion of said support means by said conveyance means, said change-over control means moves said support means from the support position to the escape position at a first moving velocity thereby to drop the sheet or the sheet bundle onto said stack means, and then moves said support means at such a second moving velocity from the escape position to the support position as is specified such that said support means pushes the sheet or the sheet bundle so as to align the rear end of the sheet or the sheet bundle

dropped on said stack means, and

wherein said second moving velocity is slower than said first moving velocity.

A sheet handling apparatus according to
Claim 1,

wherein said change-over control means includes detection means for detecting the movement of the sheet or the sheet bundle thereby to control the movement of said support means on the basis of the detection result of said detection means.

3. A sheet handling apparatus according to Claim 1 or 2, further comprising:

handling means capable of stacking a plurality of sheets temporarily on the upstream side of said stack means and said conveyance means in the sheet conveyance direction thereby to handle said sheets or said sheet bundle,

wherein the sheets or the sheet bundle handled by said handling means are conveyed to said stack means by said conveyance means.

4. A sheet handling apparatus according to Claim 3,

wherein said handling means includes: a handling tray capable of stacking the plurality of sheets temporarily; and at least one of aligning means for aligning the sheets stacked on said handling tray and staple means for stapling the

sheet bundle aligned by said aligning means.

5. A sheet handling apparatus according to Claim 1,

wherein said conveyance means can move selectively to the support position for supporting the upper face of the sheets or the sheet bundle or the escape position escaped from the upper face of said sheets or said sheet bundle.

6. A sheet handling apparatus according to Claim 1, further comprising:

a sheet returning member for returning the sheets or the sheet bundle toward said support means each time they are discharged onto said stack means.

7. A sheet handling apparatus according to Claim 1,

wherein said stack means includes a substantially horizontal sheet stacking face.

8. A sheet handling apparatus according to Claim 1,

wherein said stack means can ascend and descend.

9. An image forming apparatus comprising:

a sheet handling apparatus according to Claim 1; and

image forming means for forming an image on the sheets to be conveyed to said sheet handling apparatus.

10. An image forming apparatus comprising:

a sheet handling apparatus according to Claim 2; and

image forming means for forming an image on the sheets to be conveyed to said sheet handling apparatus.

11. An image forming apparatus comprising: image forming means for forming an image on sheets;

stack means for stacking the image-formed sheet or sheet bundle;

support means capable of moving selectively to a support position at which it supports the lower face of the image-formed sheet or the sheet bundle, or an escape position at which it escapes from the lower face of said sheet or said sheet bundle;

change-over control means for changing the support position and the escape position of said support means; and

conveyance means capable of conveying the sheet or the sheet bundle supported by said support means to said stack means.

wherein, when the rear end of the sheet or the sheet bundle is brought to reach the upper portion of said support means by said conveyance means, said change-over control means moves said support means from the support position to the escape position at a first moving velocity thereby to drop the sheet or

the sheet bundle onto said stack means, and then moves said support means at such a second moving velocity from the escape position to the support position as is specified such that said support means pushes the sheet or the sheet bundle so as to align the rear end of the sheet or the sheet bundle dropped on said stack means, and

wherein said second moving velocity is slower than said first moving velocity.

12. An image forming apparatus according to Claim 11,

wherein said change-over control means includes detection means for detecting the movement of the sheet or the sheet bundle thereby to control the movement of said support means on the basis of the detection result of said detection means.

13. A sheet handling apparatus comprising: stack means for stacking a sheet or a sheet bundle;

first support means capable of moving selectively to a support position at which it supports the upper face of the sheet or the sheet bundle, or an escape position at which it escapes from the upper face of said sheet or said sheet bundle;

second support means capable of moving selectively to a support position at which it

supports the lower face of the sheet or the sheet bundle, or an escape position at which it escapes from the lower face of said sheet or said sheet bundle;

change-over control means for changing the support position and the escape position individually independently of said first support means and said second support means; and

conveyance means capable of conveying the sheet or the sheet bundle supported by said first support means and said second support means to said stack means,

wherein, when the rear end of the sheet or the sheet bundle is brought to reach the clamping portion between said first support means and said second support means by said conveyance means, said change-over control means controls the individual timings, at which said first support means and said second means move to the escape position, thereby to drop the sheet or the sheet bundle onto said stack means, and then moves said second support means from the escape position to the support position thereby to align the rear end of the sheet or the sheet bundle dropped on said stack means.

14. A sheet handling apparatus according to Claim 13,

wherein said change-over control means controls

the timing at which said first support means moves to the escape position so that it becomes simultaneous with or earlier than the timing at which said second support means moves to the escape position.

15. A sheet handling apparatus according to Claim 13 or 14, further comprising:

handling means capable of stacking a plurality of sheets temporarily on the upstream side of said stack means and said conveyance means in the sheet conveyance direction thereby to handle said sheets or said sheet bundle,

wherein the sheets or the sheet bundle handled by said handling means are conveyed to said stack means by said conveyance means.

16. A sheet handling apparatus according to Claim 15,

wherein said handling means includes: a handling tray capable of stacking the plurality of sheets temporarily; and at least one of aligning means for aligning the sheets stacked on said handling tray and staple means for stapling the sheet bundle aligned by said aligning means.

17. A sheet handling apparatus according to Claim 13 or 14,

wherein said second support means has a lower elastic force in the supporting state than that of

said first support means in the supporting state.

18. An image forming apparatus comprising: a sheet handling apparatus according to Claim 13; and

image forming means for forming an image on the sheets to be conveyed to said sheet handling apparatus.

19. An image forming apparatus comprising: a sheet handling apparatus according to Claim 14; and

image forming means for forming an image on the sheets to be conveyed to said sheet handling apparatus.

20. An image forming apparatus comprising: image forming means for forming an image on a sheet;

stack means for stacking the image-formed sheet or sheet bundle;

first support means capable of moving selectively to a support position at which it supports the upper face of the image-formed sheet or sheet bundle, or an escape position at which it escapes from the upper face of said sheet or said sheet bundle;

second support means capable of moving selectively to a support position at which it supports the lower face of the sheet or the sheet

bundle, or an escape position at which it escapes from the lower face of said sheet or said sheet bundle;

change-over control means for changing the support position and the escape position individually independently of said first support means and said second support means; and

conveyance means capable of conveying the sheet or the sheet bundle supported by said first support means and said second support means to said stack means,

wherein, when the rear end of the sheet or the sheet bundle is brought to reach the clamping portion between said first support means and said second support means by said conveyance means, said change-over control means controls the individual timings at which said first support means and said second support means move to the escape position, thereby to drop the sheet or the sheet bundle onto said stack means, and then moves said second support means from the escape position to the support position thereby to align the rear end of the sheet or the sheet bundle dropped on said stack means.

21. An image forming apparatus according to Claim 20,

wherein said change-over control means includes detection means for detecting the movement of the

sheet or the sheet bundle thereby to control the movements of said first support means and said second support means on the basis of the detection result of said detection means.